region. If the line intersects the boundary of the selected region at the selected zone boundary point, then a determination is made in step **1508** as to whether all the zone boundary points have been selected as selected zone boundary points. If all the zone boundary points have been selected, then the method proceeds to step **1206**. If all the zone boundary points have not been selected, then another zone boundary point is selected as a selected zone boundary point in step **1500**, and steps **1502**, **1504**, **1600** and **1508** are repeated.

FIG. **17** illustrates a variation of step **1204** for the Single Boundary Point Method and the Single Boundary Point Method Using Estimated Geographic Regions. As before, a zone boundary point is selected as a selected zone boundary point in step **1500**. Then, in step **1502**, a line of predetermined slope is drawn through the selected zone boundary point. A determination is made as to whether the line of predetermined slope intersects the boundary of the selected region in step **1504**. If the line does not intersect the boundary of the selected region, then another geographic region is selected in step **1202** and steps **1500**, **1502** and **1504** are repeated. These steps are repeated until the line intersects the boundary of the selected region. If the line intersects the boundary of the selected region, then in step **1700**, a determination is made as to whether the line intersects the boundary of the selected region only at the selected zone boundary point. If the line intersects the boundary of the selected region only at the selected zone boundary point, then the selected zone boundary point is located within the selected region. If the line does not intersect the boundary of the selected region only at the selected zone boundary point, then steps **1202**, **1500**, **1502**, **1504** and **1700** are repeated until the selected zone boundary point is located within the selected region. If the selected zone boundary point is located within the selected region, then in step **1508** a determination is made as to whether all of the zone boundary points have been selected. If all of the zone boundary points have been selected, then the method proceeds to step **1206**. If all of the zone boundary points have not been selected, then another zone boundary point is selected as the selected zone boundary point in step **1500**, and steps **1502**, **1504**, **1700** and **1508** are repeated.

What is claimed is:

1. A method for identifying the geographic region of a geographic area which contains a geographic zone, said geographic zone being defined by a zone boundary of a plurality of zone boundary points, comprising the steps of:

A. dividing said geographic area into a plurality of non-overlapping geographic regions;

B. selecting one of said plurality of zone boundary points of said geographic zone as a selected zone boundary point;

C. selecting one of said plurality of non-overlapping geographic regions as a selected region, said selected region being defined by a region boundary of a plurality of region boundary points;

D. making a first determination as to whether said selected zone boundary point is located within said selected region by

drawing a line of predetermined slope through said selected zone boundary point and through said selected region so that said line intersects a first boundary point of said selected region and a second boundary point of said selected region,

checking whether said selected zone boundary point lies on said line between said first boundary point and said second boundary point, and

if said selected zone boundary point lies on said line between said first boundary point and said second boundary point, then defining said first determination to be that said selected zone boundary point is located within said selected region;

E. if said first determination is that said selected zone boundary point is located within said selected region, then repeating said step D with another one of said plurality of zone boundary points as a selected zone boundary point; and

F. if at least a predetermined percentage of said plurality of zone boundary points is located within said selected region, then identifying said selected region.

2. The method of claim **1** wherein said step D further comprises:

if said selected zone boundary point does not lie on said line between said first boundary point and said second boundary point, then defining said first determination to be that said selected zone boundary point is not located within said selected region.

3. A method for identifying the geographic region of a geographic area which contains a geographic zone, said geographic zone being defined by a zone boundary of a plurality of zone boundary points, comprising the steps of:

A. dividing s aid geographic area into a plurality of non-overlapping geographic regions;

B. selecting one of said plurality of zone boundary points of said geographic zone as a selected zone boundary point;

C. selecting one of said plurality of non-overlapping geographic regions as a selected region, said selected region being defined by a region boundary of a plurality of region boundary points;

D. making a first determination as to whether said selected zone boundary point is located within said selected region by

drawing a line of predetermined slope through said selected zone boundary point and through said selected region,

checking whether said line intersects said selected region at said selected zone boundary point, and

if said line intersects said selected region at said selected zone boundary point, then defining said first determination to be that said selected zone boundary point is located within said s elected region;

E. if said first determination is that said selected zone boundary point is located within said selected region, then selecting another one of said plurality of zone boundary points as a selected zone boundary point and making a second determination as to whether said selected zone boundary point is located within said selected region; and

F. if at least a predetermined percentage of said plurality of zone boundary points is located within said selected region, then identifying said selected region.

4. The method of claim **3** wherein step D further comprises:

checking whether said line intersects said selected region at said selected zone boundary point only.

5. The method of claim **3** wherein said step E of making a second determination as to whether said selected zone boundary point is located within said selected region further comprises:

drawing a line of predetermined slope through said selected zone boundary point and through said selected